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1. Response to Opinions and Conclusions Relying On the International Counsel on Non-Ionizing Radiation Protection's (ICNIRP) Opinions and Standards.

The following is offered in response to opinions based upon the recommendations the International Counsel on Non-Ionizing Radiation Protection (ICNIRP) and to further understand the history of guidelines in the United States.

Submitted herewith is a study by Om Gandhi and Lloyd Morgan *et al.* that explains the History of Exposure Testing, Guidelines, and Standard-Setting. Relative to ICNIRP, it states,

In 1998, a **non governmental organization**, the International Commission on Non-Ionizing Radiation Protection (ICNIRP, 1998), provided “guidelines.” * * * Many governments set or recommend exposure limits based on ICNIRP’s “guidelines”. * * * Standard setting should not be the province of non-governmental, non-accountable agencies, such as **ICNIRP which has been heavily funded by industry**, but should be carried out by governmental agencies accountable to the public or by independent experts accountable to governments. *Exposure Limits: The underestimation of absorbed cell phone radiation, especially in children.* Om P. Gandhi, L. Lloyd Morgan, Alvaro Augusto de Salles, Yueh-Ying Han, Ronald B. Herberman, & Devra Lee Davis. Electromagnetic Biology and Medicine, Early Online: 1–18, 2011.

On January 27, 2012, I took the sworn deposition (see transcript, hereinafter ‘Savitz’, submitted herewith) of Dr. David Savitz, Ph.D., a member of ICNIRP’s Standing Committee of Epidemiology and Professor of Epidemiology and Obstetrics and Gynecology at Brown University (Savitz at 9), who one would think would be a credible individual from a governmental agency. When, in fact **evidence revealed ICNIRP is an industry funded (see Savitz 79-81) non-governmental agency full of internally selected (see Savitz at 179) insider telecom lobbyists with conflicts of interest such as Anders Ahlbom** (see Exhibit F; see also,

Savitz at 85-86 – ‘a Swedish investigative journal disclosed that he had a conflict of interest, was summarily removed of the committee, as chairman of the epidemiology subgroup of the International - - of IARC’s expert workshop * * * But you hold great weight to his studies and him to this day; is that correct, A. Yes, I do.’) (see also *Id.* at 88 – ‘Were you aware of the resultant resignation of Ahlbom from the Swedish Radiation Protection Board?. A. Again, I have no firsthand information on that. Q. Would that affect your judgment in associating and collaborating with him in the future if that were to be true? A. No.’) and Maria Feychting (See Savitz at 67, discussing Exhibit G, a document stating her conflicts of interests; see also at 176) (‘but those are individuals whose opinions I would very much respect and value * * * Those are people that I’ve spent extended periods of time with talking about those issues’ and individuals such as Anthony Swerdlow. See *Id.* at 32. Dr. Savitz stated that ‘He’s a colleague that I respect as a scientist and as a knowledgeable individual.’ *Id.* at 28. Dr. Savitz states, ‘these kind of perceptions or these claims of bias they haven’t, you know, they just have not had any bearing on the direct interaction or on the quality of the work.’ *Id.* at 89. When asked to read into the record his own book, he contradicts his statements:

Although it may sound obvious it is only the quality of the data that counts. This issue arises in considerations of disclosure of financial support for research that may bias the investigator, Davidoff, et al., 2001. The interpretation of database on the intent or preconceptions of the Investigator Savitz and (inaudible) 1995 and most insidiously when research is judged based on the track record of those who generate it. *Id.* at 77.

When asked if he would agree with his book that the quality of the data and considerations of disclosure of financial support for research should be taken into consideration, Dr. Davitz replied, ‘I had intended to almost in essence make the opposite statement * * *.’ That is simply an unbelievable assertion and one would wonder why he would even attempt to argue that funding bias has no outcome on studies, except to defend his own work and that of his closest comrades, such as Ahlbom. Dr. Savitz further cites industry-funded studies by *Ahlbom*,

Feychting, and *Rapacoli* (*Valberg* report states that Repacholi has consulted for telecommunications and electrical power companies). See *Id.* at 176, 181-183; See also, *Repacholi Admits Interference from the Industry at the World Health Organisation EMF Project*, <http://www.mastsanity.org/home/2/168-repacholi-admits-interference-from-the-industry-at-the-world-health-organisation-emf-project.html>; See also, 255-256 (discussing an editorial in support of the *Frei*, et.al, study that badly tarnish Ahlbom's and Feychting's credibility). Furthermore, his deposition revealed that he has done research funded by the Electrical Power Research Institute (EPRI), and entity that is funded through fees from the electrical utility industry. Savitz at 37-38; 45.

When asked about if he and his co-authors recorded any financial support that may have biased their conclusions and opinions, Dr. Savitz avoided the questions by stating he complied with journal requirements. When noted that journal articles historically did not require such disclosure, he agreed: 'So that -- so you felt that you have complied with disclosure just because you complied with the journal's requirements? A That's correct, yes.' Savitz at 94. Dr. Savitz further testified that disclosure in journals is a distraction. Savitz at 94.

Dr. Savitz admits to having a diversified financial portfolio that 'probably' includes power companies, telecommunication companies or companies that would be contributing to EPRI, and hundreds other investments. See Savitz at 87. And admits to research funding from EPRI. *Id.* at 104.

When asked about his bold declaration, Expert Report of Dr. David Savitz, Ph.D., Paragraph 14a, that 'in the case of WI-FI exposure, there is no epidemiological evidence *whatsoever* that counters the lack of biological support for a potential health hazard,' in light of Mr. Morgan's Amended Declaration citing two studies showing detrimental effects from WI-FI radiation was well as Dr. Havas' Amended Declaration - - faced with these studies, Dr. Savitz

held firm that there was *no epidemiological evidence whatsoever*, ‘If there’s new studies that have come out or studies that I’m unaware of * * * Obviously there is always the potential for that being incomplete.’ *Id.* at 118.

Dr. Savitz admits that alternatives to WI-FI is ‘certainly beyond my technical expertise.’ *Id.* at 154; see also at 90-91 (‘I - - again I don’t - - I probably should just confess the ignorance of the details of the nature of the radiofrequency signal that is used’). Furthermore, he is unable to estimate the amount of WI-FI microwave – pulse modulated radiation the average student in school would involuntarily absorb during a school day. *Id.* at 225.

Furthermore, Dr. Savitz’s methods are unreliable. See Savitz at 187-190, 198, 217 (discussing his conclusion, See Savitz Declaration, that there is no association of ipsilateral brain cancers studies - - despite his own paper, *Mixed Signals on Cell Phones and Cancer*, stating ‘One striking aspect of their findings is that risk for long-term users was confined entirely to the side of the head on which the phone was most often used.’). See also, discussion above regarding Savitz’ interpretation of Studies showing statistically significant odds ratios. Dr. Savitz also chose a study (*Aydin*) researching childhood brain cancer that did not include the most common type of childhood brain cancer, pilocytic astrocytoma. See *Id.* at 205. Dr. Savitz also dismisses studies such *Linnet and Ahlbom* showing association between electrical wiring and childhood leukemia. Savitz at 222-223. Finally, Dr. Savitz denies that distance from a transmission towers is not an accurate surrogate for exposure, even when confronted with the Vatican Radio Study that shows mortality rates declined with increased distance at roughly twice the death rate in children compared to adults. Savitz at 228, 233.

2. Response to Opinions and Conclusions Based on Various Health Organizations Considered ‘Scientifically-Based Authorities.’

Alleged ‘Scientifically-based,’ authorities relied upon in support of current or increased exposure standards include the World Health Organization, National Cancer Institute, National Institute for Environmental Health Sciences, American Cancer Society, Institution of Electrical Engineers (IEE), the International Commission on Non-Ionizing Radiation Protection, and the FCC (who relies upon the FDA and EPA).

First, looking at **the FCC**, the FDA, and the EPA. In sum, they are all agencies captive¹ of industry. The Center for Public Integrity examined the travel records of FCC employees and found that they have accepted 2,500 trips, costing nearly \$2.8 million over the past eight years, paid for by the telecommunications and broadcast industries, which are, theoretically, ‘regulated’ by the FCC. <http://www.alternet.org/story/16032/>. Those who work at captive agencies come to identify with their industry and believe their function is to service it, not regulate it. For example, Meredith Attwell Baker left her post as FCC commissioner to take a lobbying job at Comcast just a few months after she voted to approve Comcast’s massive purchase of NBC Universal. Moreover, according to the FCC and FDA websites as of October, 2010:

FCC: “The Commission has stressed repeatedly that it is not a health and safety² agency and would defer to the judgment of these expert agencies [EPA, FDA, and other federal agencies] with respect to determining appropriate levels of safe exposure to RF energy.”³ “There is no federally developed national standard for safe levels of exposure to radiofrequency (RF) energy”. <http://www.fcc.gov/guides/wireless-devices-and-health-concerns>

FDA: “Under the law, FDA does not review the safety of radiation-emitting consumer products such as mobile phones before marketing...”

¹ The FCC is what is known in government circles as a “captive agency.” It has been captured by the industry it is supposed to regulate. Those who work at captive agencies come to identify with their industry and believe their function is to service it, not regulate it.” (Rotten, Old-Fashioned Corruption at the FCC, By Molly Ivins, AlterNet, Posted on May 29, 2003, Printed on June 1, 2012. http://www.alternet.org/story/16032/rotten%2C_old-fashioned_corruption_at_the_fcc)

² The FCC has, as of 2003, only one radiofrequency exposure specialist to both oversee reviews of equipment authorization applications that involve radiofrequency exposure evaluation. Appendix I Comments from the Federal Communications Commission; page 34, GAO-01-544 Mobile Phone Health Issues.

³ See, for example: http://transition.fcc.gov/Bureaus/Mass_Media/Databases/documents_collection/96-326.pdf,

The EPA – In a draft report issued in March 1990, the EPA recommended that EMFs be classified as a Class B carcinogen -- a "probable human carcinogen and joined the ranks of formaldehyde, DDT, dioxins and PCBs."⁴ After the EPA draft report was released, utility, military and computer lobbyists came down hard on the EPA. The recommendation, which could have set off a costly chain of regulatory actions, was deleted from the final draft after review by the White House Office of Policy Development. "The EPA thing is a stunner," says Paul Brodeur, a writer for the New Yorker. "It's a clear case of suppression and politicization of a major health issue by the White House." Brodeur, *The Great Power-Line Cover-Up* (1993).

The FDA – One probably doesn't have to look farther than Dr. Stanislaw Burzynski, M.D. to understand the problems and industry influence at the FDA. Dr. Burzynski is a medical doctor and Ph.D. biochemist who discovered Antineoplastons, an extremely good cancer drug with no side effects. His legal battle brought on by the FDA can be viewed at: <https://www.youtube.com/watch?v=jRua3NLg-Z8>. Another example of industry influence on this captive agency, is exemplified in regard to FDA commissioner Margaret Hamburg's conflicts of interest with the dental amalgam filling rule and the largest distributor of amalgam, Henry Schein.⁵ See also, how the FDA secretly monitored the personal e-mail of nine

⁴ See for example, <http://emf.mercola.com/sites/emf/emf-dangers.aspx>.

⁵ On August 4, FDA published a rule that allows amalgam sellers to conceal from consumers the fact that amalgam's major component is mercury. FDA won't even require disclosure of this highly relevant information to young women and parents –despite admitting that children and the unborn are more susceptible to mercury's neurotoxic effects and conceding that no study indicates that mercury amalgam does not pose these known neurological risks to these subpopulations.¹ Not only does FDA's new rule cover up the mercury in amalgam from American dental patients, but it withdraws an accurate FDA consumer website that advised parents and young women that dental mercury can cause neurological harm to children and unborn children.² Instead, FDA hands amalgam sellers carte blanche authority to market mercury amalgam under the deceptive term "silver fillings"³ (the phrase that has for so long confused dental patients, most of whom, according to surveys, would choose an alternative based solely on awareness that amalgam is mainly mercury).⁴ The rule is so callous toward children and so deferential toward amalgam sellers that it actually states an aspiration to reverse a decline in mercury exposure⁵ even though FDA acknowledges that mercury exposure can lead to neurological damage, kidney problems, and similarly-severe injuries.⁶ <http://www.mercuryexposure.info/scandals/food-drug-administration/item/763-fda-commissioner-margaret-hamburg-and-conflicts-of-interest-with-mercury-filling-rule>

whistleblowers-its own scientists and doctors-over the course of two years. The monitored employees had warned Congress that the agency was approving medical devices that posed unacceptable risks to patients. See <http://articles.mercola.com/sites/articles/archive/2008/08/07/major-confusion-on-how-to-do-breast-checks.aspx>.

The NCI – This agency is also part of the mix. For example, decades ago, in 1974, the National Cancer Institute (NCI) was warned by professor Malcolm C. Pike at the University of Southern California School of Medicine that a number of specialists had concluded that "giving a women under age 50 a mammogram on a routine basis is close to unethical." Additionally, Dr. Epstein, M.D., professor emeritus of Environmental and Occupational Medicine at the University of Illinois School of Public Health, and chairman of the Cancer Prevention Coalition, states:

“They were conscious, chosen, politically expedient acts by a small group of people for the sake of their own power, prestige and financial gain, resulting in suffering and death for millions of women. They fit the classification of "crimes against humanity."”

Not surprisingly, as often happens when anyone dares speak out against those in power, both the American Cancer Society and NCI called Dr. Epstein’s findings “unethical and invalid.” *Id.*

Regarding NCI and the telecommunications industry influence, Last July, the first study, CEFALO study, of the risk of brain cancer associated with cellphone use among children and adolescents was published in the Journal of the National Cancer Institute. <http://jnci.oxfordjournals.org/content/early/2011/07/27/jnci.djr244.abstract>. The study concluded that, “The absence of an exposure–response relationship either in terms of the amount of mobile phone use or by localization of the brain tumor argues against a causal association.” Later, the Journal published Letters to the Editor (Correspondences) by highly respected

scientists, including Lloyd Morgan, that refute this conclusion and makes it clear that the published findings, in contrast to the authors' cryptic conclusion, indicates a serious risk of brain cancer associated with cellphone use. These Letters to the Editor also pointed out multiple examples of contradictory data that implied that the peer review was inadequate. For example, using cellphone billing records (which do not rely on the children's memory of their cellphone use) the study found a statistically significant 115% increased risk of brain cancer after more than 2.8 years since they first had a cellphone subscription. The study also reported a 99.9% of confidence that the more the cellphone was used, the higher the risk of brain cancer (indicating a dose-response relationship). One example of these contradictory data was: the reported percentages of children with billing records would mean that there should be 123 children with brain cancer (cases), and 200 children without brain cancer (controls). Yet the table that reported the number of cases and controls listed 196 cases and 360 controls. It is surprising that peer reviewers would not have noted this contradiction.

The **WHO**, **IARC**, and **NIEHS** – The Coffee Manifesto –

Being exposed to EMFs is no more hazardous to your health than drinking a cup of coffee⁶. That's the message from the World Health Organization (WHO).

After the International Agency for Research on Cancer (IARC) classified power-frequency EMFs as possible human carcinogens last summer, we began to wonder how this ratcheting up of the health risk would play among the skeptics.

We found the answer in a new booklet on communicating EMF risks (see p.17). Inside, the WHO EMF project cites only one other agent designated as a possible carcinogen by IARC— coffee.

WHO's Mike Repacholi and Leeka Kheifets could pick from among 232 IARC possible carcinogens, including carbon tetrachloride, DDT and lead. But most of these appear less benign than coffee and might have prompted some public alarm.

⁶ The notion that coffee and talc sound better than DDT or other agents that are classified in the same category, does not weaken the fact that all these agents are in this category on the basis of evidence of cancer studies; otherwise they would not be classified in the first place.

To further cushion the blow, the WHO adds that coffee may be good for you: While acknowledging that it might increase the risk of kidney cancer, the WHO also tells the reader that coffee might protect against colon cancer. And, of course, many of us could not start the day without a good jolt of coffee.

EMFs are famously linked to childhood leukemia. But we had never before considered the possibility that EMF exposure could actually benefit children. Yet, soon afterwards, we came across a fact sheet from the Catholic school system in Edmonton that said just that. Children exposed to EMFs have lower rates of cancer, according to the fact sheet. (For the record, that is not our added emphasis.) This is the same school system that reported, “Every expert we talked with and studies we researched did not find a link to EMFs and childhood leukemia.”

A serious attempt to settle the controversy over microwave-induced leakage through the blood-brain barrier. This is the third year in a row for this particular wish. Hello! Is anyone paying attention?

And under our Christmas tree, we hope Santa will leave us a taste of whatever Q. Balzano and Asher Sheppard were smoking when they penned their over-the-top assault on the precautionary principle (see p.17).

Who on earth have these Canadian Catholics been talking to? The most likely source is Mary McBride (see p.3). She says that the plan to site a new school next to a power line—which she endorses—is consistent with WHO’s recommendations. In its own newly revised EMF booklet, the National Institute of Environmental Health Sciences (NIEHS) thankfully steers clear of the coffee paradigm but still takes a dismissive view of the potential health risks (see p.2).

Four years ago, a panel convened by the NIEHS also designated EMFs as possible carcinogens. Rather than seeing the IARC decision as reaffirmation, the institute’s resolve appears to have weakened and it is no longer promoting strategies that would reduce unnecessary EMF exposures.

Chris Portier, who helped draft both the NIEHS and the WHO booklets, seems to have changed his outlook. At last summer’s IARC meeting, he was the one who forcefully argued that the animal data, not just the epidemiology, suggest a cancer association (see MWN, J/A01). Had he convinced three more of the 21 panel members to join him, IARC would have classified EMFs as probable human carcinogens, putting them in a class with benzopyrene, PCBs and UV radiation.

Portier, the associate director of the U.S. National Toxicology Program and the director of NIEHS' Environmental Toxicology Program, has a lot of clout. We wonder why he changed his mind—clearly, he is not impressed by the new California report (see p.2)—and why he now chooses not to give the American public fair warning about EMF health risks.

In the past, both the WHO and the NIEHS have endorsed prudent avoidance, or taking low-cost steps to reduce EMF exposures. That now seems to be history. Today's message is "Don't worry, be happy, have another espresso."

<http://microwavenews.com/news/backissues/n-d02issue.pdf>, at 19.

Also, when one speaks of the WHO, we must also speak of Dr. Michael Repacholi (whom Dr. Savitz holds in high regard). In his paper, *Radiofrequency/Microwave Radiation and the International Agency for Research on Cancer (IARC) – The problem of conflict of interest & commercial influence in WHO agencies and the need for public interest representation*, May 5, 2011, www.emfacts.com/download/IARC_2011_IARC_May_5_FINAL.pdf, Don Maish, Ph.D. states:

IARC was established in 1965 as an agency of the WHO, requiring its members to have no real or apparent conflicts of interest – meaning that they cannot be working for the affected industry.

The International Agency for Research on Cancer (IARC) was established in 1965 as part of the World Health Organization. Its mission is to coordinate and conduct research on the causes and mechanisms of human cancer which, in turn, will be used to develop strategies for cancer prevention and control. One of the important roles of the IARC is to disseminate scientific information through publications (Monographs), meetings, coerces and fellowships. The Monographs developed by the IARC cover a wide range of environmental factors which may increase the risk of cancer, such as chemicals and compounds, occupational exposures, electromagnetic fields, physical and biological agents as well as lifestyle factors. Since 1971, more than 900 agents have been evaluated, of which more than 400 have been identified as carcinogenic, probably carcinogenic, or possibly carcinogenic to humans.

Dr. Michael Repacholi, Emeritus Chairman of ICNIRP since 1996, from the WHO testified at an Australian Senate telecommunications Inquiry in 2001:

The WHO takes the view that there cannot be industry representation on standard setting working groups. There cannot be someone on the working group who is having an influence on health effects for an industry when they derive benefit from that industry.⁸

The IARC requirements (pre 2005) for handling conflict of interest were revised and made more transparent as a direct result of a series of critical articles published in The Lancet Oncology and The Lancet in 2003 that questioned the credibility of the IARC. Among a number of concerns, the articles highlighted concerns about “the inappropriate influence of invited specialists who had links to industry”. As a result of the concerns, The Lancet introduced the Policy Watch section that summarized the key findings of every IARC Monograph meeting up to 12 months before the corresponding Monograph was published. As a result of this ‘surveillance’ of the IARC Monograph process, by 2005 IARC had revised its conflict of interest policy in line with the Lancet’s Policy Watch.⁹ However, as this paper contends “inappropriate influence of invited specialists who had links to industry” in IARC meetings is still a major issue that needs to be addressed.

Repacholi has now admitted that a large proportion of the WHO-EMF Project funding was sourced via donations sent to the Royal Adelaide Hospital from where Repacholi was seconded.

"In 1996 the World Health Organization [WHO] began what it said was a program "to assess the scientific evidence of possible health effects of EMF in the frequency range from 0 to 300 GHz" (EMF Project). The person placed in charge of the program ... was Michael Repacholi, who had been known for more than 6 years to be a paid consultant and spokesman for the companies responsible for producing EMF pollution". Professor Andrew Marino, Louisiana State University.

It would appear that not only did Repacholi control the WHO EMF project from its inception, but its main source of funding was Industry.

"Repacholi states that he always followed the WHO rules on funding and that, "NO funds were EVER sent to me." [His emphasis.]

This is financial legerdemain. As Microwave News has previously reported, Repacholi arranged for the industry money to be sent to the Royal Adelaide Hospital in Australia, where he used to work. The funds were then transferred to the WHO. Seven years ago, Norm Sandler, a Motorola spokesman, told us that, "This is the process for all the supporters of the WHO program." At the time, Motorola was sending Repacholi \$50,000 each year. That money is now bundled with other industry contributions and sent to Australia by the Mobile Manufacturers Forum (MMF), which gives the project \$150,000 a year.

"What is the difference between sending money directly to the WHO and sending it via Australia?," we asked Repacholi last December. He never responded. We don't think there is any difference. We don't understand how the WHO can see this as anything other than money laundering. On numerous occasions we have asked

Repacholi to reveal all the sources of the funding of the WHO EMF project. He has consistently refused." Microwave News November 17th 2006

The indirect funding arrangement was terminated after Repacholi's recent departure from the WHO, as follows:-

"The project is currently funded solely through extra-budgetary contributions from participating countries and other agencies. All contributions and accounting are audited by WHO.

Several governments provide either periodic or ad-hoc direct contributions to the WHO EMF Project, while others support financially specific activities.

Through an agreement set up in 1995 between WHO and the Royal Adelaide Hospital (RAH) in Australia, RAH provided financial management of funds received from contributions of non-governmental entities [i.e. presumed to be Industry - companies with vested interests in maintaining the discredited illusion that Mobile Phones, wireless devices and Powerlines are safe] on behalf of the Project. Dr Repacholi was seconded from RAH to WHO from the time of the agreement until his retirement from WHO in June 2006. Following Dr Repacholi's departure, the agreement was terminated in early 2007. New funding sources are now being sought." WHO Progress Report June 2006-2007. <http://iddd.de/umtsno/puzmud.htm> (entitled *We wish this man, M. Repacholi, brought to justice*).

Then, just months after leaving his post as the head of the EMF project at the WHO, Repacholi is in business as an industry consultant. The Connecticut Light and Power Co. (CL&P), a subsidiary of Northeast Utilities, and the United Illuminating Co. (UI) have hired Repacholi to help steer the Connecticut Siting Council away from a strict EMF exposure standard. <http://microwavenews.com/CT.html>.

Another example of industry influence on Repacholi and the WHO is in the case of nuclear energy. To-wit:

In 2006 the WHO released a report on the progress of the Chernobyl Forum titled, Health Effects of the Chernobyl Accident and Special Care Programmes edited by B Bennett, Zhanat Carr and *Michael Repacholi*. The report purported to be "the result of a sound scientific evaluation of the available evidence and provides a firm basis for moving forward" but largely discounted harmful impacts on populations exposed to Chernobyl radiation. For example, in relation to a reported significant decrease in the health of children in areas of Russia and the Ukraine, the report dismissed this with the claim that "this has not been shown to be related to radiation dose and may be the result of increased anxiety, increased reporting, other non-

radiation accident related causes or poorer health care.” In its dismissal of the adverse effects of radiation the report concluded that the biggest public health problem caused by the accident as of 2006 was the impact on mental health.²³ In other words, the biggest problem was people making themselves sick by worrying over radiation.

This is a similar type of argument proposed by Dr. Savitz to explain the protection allegedly found in the flawed Danish Interphone Study:

the correlation between cellphone use and lower cancer rates could simply be an indicator of socioeconomic advantage—in other words, because early adopters of cell phones tended to be wealthier and more attentive to their health, they very well could have a lower incidence of cancer. See Deposition of David Savitz ("Savitz Dep.") at 156:23-157:11.

Most recently, an academic example of industry influence is that of Professor Annie Sasco, a medical doctor with three Harvard degrees. Dr. Sasco headed up the prevention team at IARC for over 20 years before they decided they didn't want a 'cancer prevention team,' she then went as a professor to INSERM at Bordeaux. Following her outspoken talk (and separate strong criticism of late years dishonest CEFALO study regarding children, mobile phones and cancer risks) at the recent CHILDREN with CANCER UK conference, which Alasdair Philips, the world's foremost electromagnetic engineer, helped organize, Dr. Sasco returned to Bordeaux to find her professorship terminated and a request to vacate her office immediately. This information was provided to me by Mr. Philips; However, see also, <http://weepnews.blogspot.com/2012/05/me-supreme-court-scientist-silenced.html>.

Notwithstanding all the conflicts of interests of these organizations, both the WHO and IARC advise children to reduce their exposure to microwave radiofrequency radiation. See, <http://weepnews.blogspot.com/2012/05/me-supreme-court-scientist-silenced.html>.

ICNIRP – *The Chinese Wall* - We don't have to look much past the deposition of Dr. Savitz, dkt 82-8, to understand the industry influence on ICNIRP. In fact, ICNIRP is funded by industry, yet writes on their website that they are independent. This alone makes the ICNIRP an unreliable contradictory body. For example of industry funding and conflicts of interest, we look no further than Maria Feychting, professor of epidemiology at the Karolinska Institute, KI, and recent Vice President of ICNIRP. While she partially funded his research into health and mobile phones via the telecom industry, which she openly recognizes * * * to ICNIRP, TeliaSonera, Ericsson and Telenor contributes 50 percent of the cost for the Swedish part of the research project Cosmos (with over 50 000 mobile subscribers), now about 7 million. Yet, Maria Feychting sees no conflict in leading ICNIRP's activities while she receives industry funding. I do not think there is a problem because funds channeled through third parties acting firewall between our researchers and industry, ensuring our independence, she says. But Ny Teknik's audit shows that the industry and scientists first discuss together about the funding and then turn to Vinnova and request authority to act an intermediary. Vinnova officer Pontus von Bahr stated that the parties came to the former Director-General Per Eriksson with the arrangement. In this context, established a so-called Firewall Agreement 2007, which will protect researchers from "undue influence" of mobile stakeholders. Anders Ahlbom, who's integrity as a scientist was questioned last year by a working group of the UN's cancer research agency IARC, says, 'It may seem conspiratorial and wonder that we have informal contacts with industry, *but we are totally independent*. My understanding is that the telecom industry [is] to contribute funding.' This is an instance of those (Geychting and Alhbom), who Dr. Savitz hold in such high regard (see Plaintiffs' motion to exlude, at 5-6), also talking out of both sides of their mouths.

American Cancer Society – The American Cancer Society is considered the ‘Goldman Sachs’ of health care and has serious conflicts of interest. Dr. Samuel S. Epstein, M.D., professor emeritus of Environmental and Occupational Medicine at the University of Illinois School of Public Health, and Chairman of the Cancer Prevention Coalition, is the leading critic of the cancer establishment, the National Cancer Institute (NCI) and American Cancer Society (ACS), for fixation on damage control--screening, diagnosis and treatment, and genetic research--with indifference for cancer prevention, which for the ACS extends to hostility. This mindset is compounded by conflicts of interest with the cancer drug industry, and also with the petrochemical and other industries in the case of the ACS. For example, Dr. Epstein notes:

ACS has received contributions in excess of \$100,000 from a wide range of "excalibur donors." Some of these companies were responsible for environmental pollution with carcinogens while others manufactured and sold products containing toxic and carcinogenic ingredients: petrochemical companies / du pont, bp, and pennzoil; Industrial waste companies / bfi waste systems; big pharma / astra zeneca, bristol myers squibb, glaxo smith kline merck& co. and novartis; Auto companies / nissan and GM; Cosmetic companies / christian dior, avon, revlon and elizabeth arden; junk food companies / wendy's intl. mcdonald's unilever/best foods, and coca cola; biotech companies / amgen and genetech). Nevertheless, as reported in the December 8, 2009 NY Times, the ACS claims that it "holds itself to the highest standards of transparency and public accountability." See, Epstein, M.D., ACS, More interested in Accumulating Wealth Than Saving Lives. <http://www.wnho.net/acs.pdf>.

3. Response to Arguments Relying on Epidemiologic Studies.

In response to arguments that epidemiology is the only valid method for making a determination of whether or not a toxicant is a potential risk, ICNIRP's Dr. Savitz, Ph.D., agrees that epidemiologic studies, the counting of dead bodies, is not required (Savitz at 133:15-25 – 144:2-4):

Q Is epidemiology the only valid method for making a determination as to potential risk?

A No, of course not. It's one of tools that are useful, but there are times if there is a compelling case **based on toxicology or based on what we know by analogy we may not need direct epidemiologic study to believe that there is a hazard there.** For example, a known toxic chemical, if there's another chemical that is really quite similar or **if we know that one form [144] of an agent is harmful we may without awaiting epidemiology assume that the other form is harmful as well.**

4. Response to Arguments Arguing Lack of Studies Showing Harm.

Upon information and belief, by 1980 there were in excess of 20,000 studies showing adverse health effects from electromagnetic fields (EMF) and radiofrequency (RF) radiation. In fact, The Alliance for Human and Environmental Health compiled a list, submitted herewith, of 5,000 studies evidencing adverse health impacts of EMF/RF radiation.

5. Response to Arguments of General Acceptance.

It is no longer generally accepted that exposure to microthermal pulsed-modulated microwave radiation is not harmful. To-wit:

a. 'The Congress hereby declares that the public health and safety must be protected from the dangers of electronic product radiation.' Public Law 90-602, Sec. 354, October 18, 1968.

b. In November 1989, the Department of Energy reported that 'It has now become **generally accepted** that there are, indeed, biological effects due to field exposure.'

c. [PCS emissions] "are in the family of radiofrequencies with known adverse effects." – Robert Watkins, Senior Radiation Scientist, MA Dept of Public Health, July 1998.

d. (USA) NIEHS and NIOSH classifies electromagnetic (EMF's) as a hazardous substance. NIEHS advocates prudent avoidance of EMF's. <http://www.niehs.nih.gov/research/resources/library/consumer/hazardous.cfm>.

e. Prudent avoidance has been adopted in Australia, Sweden, and several U.S. states, including California, Colorado, Hawaii, New York, Ohio, Texas, and Wisconsin. http://www.who.int/peh-emf/meetings/southkorea/en/Leeka_Kheifets_principle_.pdf.

f. Taiwan removes 1,500 cell towers near schools: <http://www.chinapost.com.tw/taiwan/2007/11/06/129715/1500-cellphone.htm>.

g. Several schools in England, France, and Canada, have dismantled their WI-FI systems after complaints from teachers and parents. Additionally, an English teachers union call to suspend WiFi in schools: <http://www.dailymail.co.uk/news/article-1039235/Suspend-wi-fi-schools-says-union-chief-followingreports-causes-ill-health.html>

h. Frankfurt, Germany: Bans WiFi in public schools (in German). http://www.buergerwelle-schweiz.org/fileadmin/user_upload/buergerwelle-schweiz/Mobilfunk/Frankf_Rund_keinWLAN.pdf.

i. In 2005, the Austrian Medical Association published a recommendation to use cables instead of WI-FI and to ban WI-FI in schools. <http://www.telegraph.co.uk/news/uknews/1549944/Warning-on-wi-fi-health-risk-to-children.html>

j. The Salzburg Government, the Frankfurt Local Education Authority and the German Teachers Union have also banned or advised against the use of WI-FI in schools.

k. In 2007, the French National Library removed all WI-FI systems in Paris due to health complaints from staff.

l. In September 2007, the German Government issued a warning to citizens to avoid using WI-FI in the workplace or at home, suggesting cabled connections instead.

m. August 2007 - The BioInitiative Group, of 20 Scientists, doctors and professors, and whos lead author was Dr. Carpenter, released their 610 page report citing more than 2,000 studies that detail the toxic effects of electromagnetic fields from all sources. Chronic exposure to even low-level radiation (like that from cell phones), can cause a variety of cancers, impair immunity, and contribute to Alzheimer's disease and dementia, heart disease, and many other ailments. It warned that the effects of prolonged exposure of radio frequencies such as WI-FI on children cannot be declared safe.

n. In September 2007, following Dr. Carpenter's lead authoring of the *Bioinitiative Report*, Europe's top environmental watchdog, the European Environmental Agency, called for immediate action to reduce exposure to radiation from WI-FI, mobile phones and their masts. It suggested that delay could lead to a health crisis similar to those caused by asbestos, smoking and lead in petrol. The European Parliament Sept 2008 voted 522 to 16 to adopt text: "is greatly concerned at the Bio-Initiative international report concerning EMFs, which summarizes over 1500 studies on that topic and which points in its conclusions to the health risks posed by emissions from mobile-telephony devices such as mobile telephones, UMTS, WiFi, WiMax and Bluetooth, and also DECT landline ". "The limits on exposure to electromagnetic fields [EMFs] which have been set for the general public are obsolete."

<http://new.marketwire.com/2.0/release.do?id=901580>.

o. October 2009 - The U.S. government releases classified military documents on the biological effects of Microwave Radiation from 1971. The detailed report by the Naval Medical Research Institute lists hundreds of papers from around the world showing that microwave radiation causes biological changes. The report was declassified in 2009. http://www.safeschool.ca/uploads/Navy_Radiowave_Brief_1_.pdf (PDF of declassified U.S. Navy Report on the Biological Effects of Microwave Radiation). Many of the individual documents can be viewed at <http://www.magdahavas.com/>. The entire collection was donated to Dr. Havas by the author, Dr. Zory Glasser.

p. The Seletun Panel (February, 2011), consisting of international scientists and experts, including Lloyd Morgan, recommends wired internet access in schools, and *strongly recommends* that schools do not install wireless internet connections that create *pervasive and prolonged* EMF exposures for children. http://www.sagereports.com/smart-meter-rf/docs/Fragopoulou_et_al_2010b.pdf. The Panel was led by Professor Olle Johansson, Ph.D.(Associate Professor, The Experimental Dermatology Unit, Department of Neuroscience, Karolinska Institute, Stockholm, Sweden) who submitted an open letter to Canada's Greater Victoria School District stating further explaining his concern that, 'WI-FI routers can not be regarded as safe in schools, but must be deemed *highly hazardous and unsafe for the children* as well as for the staff.' See <http://www.heartmdinstitute.com/wireless-safety/why-get-wired-schools>.

q. In April 2011, the Russian National Committee on Non-Ionizing Radiation Protection (RNCNIRP) found:

Prevention childhood and juvenile diseases from exposure to EMF sources is of paramount social and economic importance. * * * This problem has been already recognized by the international community: in May 2011, the World Health Organization (WHO) will be organizing the Second International Conference: "Non-ionizing Radiation and Children's Health" dedicated to health protection of children exposed to EMF sources of various frequency ranges. It is the WHO's opinion that a "child is more vulnerable to

environmental factors.” * * *

Human brain and the nervous system tissues directly perceive EMF *and react irrespective of its intensity*, and in certain cases it depends on EMF modulation. * * * Analysis of scientific peer-reviewed national and international publications as well as analysis of actual population exposure to EMF have allowed the RNCNIRP to formulate 10 postulates. * * *

1. For the first time in human evolution, the brain is daily exposed to modulated EMF at all developmental stages.

2. Absorption of EMF in a child’s brain is greater than in adult phone users; larger brain areas including those responsible for intellectual development are exposed in a child’s brain.

3. A child’s brain is undergoing development and its intellectual development are exposed in a child’s brain. * * *

5. A child, due to its perception features, is unable to recognize the mobile phone as the source of harmful EMF exposure. * * *

9. The Specific Absorption Rate (SAR) used for declaration of a mobile phone safety, equal to 2 W/kg averaged over ten grams of brain tissue, in the opinion of the RNCNIRP, cannot be viewed as sufficiently scientifically grounded in this case, and its use does not guarantee protection of children and juvenile health.

10. Global changes in the electromagnetic background caused by the development of modern mobile technologies, is an evolutionary factor requiring adaptation of children and adolescents to this harmful environmental factor. * * *

It is reasonable to set limits on mobile telecommunications use by children and adolescents, including ban on all types of advertisement of mobile telecommunications for children (teenagers) and with their participation* * *

Better safety criteria for children and teenagers are required *in the nearest term*. Features of the developing organism should be taken into account, as well as the significance of bioelectric process for human life and activities, present and future conditions of EMF, prospects of technological and technical development should be addressed in a document of legal status. (Italics added). RNCNIRP, *Electromagnetic Fields From Mobile Phones: Health Effects on Children and Teenagers*, (Italics added) April 2011, www.scribd.com/doc/55420788/Electromagnetic-Fields-from-Mobile-Phones-Health-Effect-on-Children-and-Teenagers.

r. On May 6, 2011, a study by the Council of Europe Committee on the Environment, Agriculture and Local and Regional Affairs, concluded that ‘mobile phones, DECT phones or WiFi or WLAN systems from classrooms and schools, as advocated by some regional authorities, medical associations and civil society organizations * * *.’
<http://assembly.coe.int/main.asp?Link=/documents/workingdocs/doc11/edoc12608.htm>. It highlights that young people are most at risk. *Id* at 2. It requires that we take all reasonable measures to

reduce exposure to electromagnetic fields on ‘as low as reasonably achievable’ (ALARA) (*Id.*) principles, especially to radio frequencies from mobile phones, and particularly the exposure to children and young people who seem to be at most long-term risk from head tumors. It asked education and health authorities to develop information campaigns ‘aimed at teachers, parents and children to alert them to the specific risks of early, ill-considered and prolonged use of mobiles and other devices emitting microwaves.’ *Id* at 3.

s. February, 2011 - Scientists at the National Institutes of Health in the U.S. discover that microwaves emitted by cell phones cause changes in the brain. These biological changes are well below the "thermal level". Click full study: Effect of Cell Phone Radiofrequency Signal Exposure on Brain Glucose Metabolism. http://www.safeschool.ca/uploads/Cell_Phone_full_study.pdf.

t. Germany’s Radiation Protection Commission is recommending a policy of prudent avoidance. In a report released on September 14, the panel—known by its German acronym SSK— calls for “minimizing” exposures to both ELF and RF/MW EMFs to the extent “technically and economically reasonable,” especially in locations where people spend extended periods of time, such as schools. The radiation office’s current director, Wolfram König, advised against the use of mobile phones by children and called for restrictions on base station antennas near schools and hospitals (see MWN, J/A01). The full text of the SSK’s 56 page report, *Limits and Precautionary Measures to Protect the Public Against Electromagnetic Fields*, is available in German at <www.ssk.de>.

u. The Physicians and Scientists for Responsible Application of Science and Technology recently conducted research that concluded, ‘A considerable body of evidence proves, beyond reasonable doubt, that microwave radiation from mobile phones and cordless phones cause a significantly increased risk for brain tumours. * * * In addition, increasing evidence is indicating that it causes disturbed brain function, damage to the genes and other disturbances.’ (*Italics added*) www.psrast.org/mobileng/mobilstarteng.htm, June 4, 2011.

v. On January 19, 2012, The Board of the American Academy of Environmental Medicine opposed the installation of wireless “smart meters”, which uses the same 2.4 GHz frequency microwaved pulsed radiation as does WI-FI - another rose, in homes and schools based on a scientific assessment of the current medical literature (references available on request). Chronic exposure to wireless radiofrequency radiation is a preventable environmental hazard that is sufficiently well documented to warrant immediate preventative public health action:

As representatives of physician specialists in the field of environmental medicine, we have an obligation to urge precaution when sufficient scientific and medical evidence suggests health risks which can potentially affect large populations. The literature raises serious concern regarding the levels of radio frequency (RF - 3KHz – 300 GHz) or extremely low frequency (ELF – 300Hz) exposures produced by “smart meters” to warrant an immediate and complete moratorium on their use and deployment until further study can be performed.

* * *

Existing safety limits for pulsed RF were termed “not protective of public health” by the Radiofrequency Interagency Working Group (a federal interagency working group including the FDA, FCC, OSHA, the EPA and others).^{7,8}

⁷ <http://aaemonline.org/images/CaliforniaPublicUtilitiesCommission.pdf>.

⁸ It is worth noting what the American Academy of Environmental Medicine thinks of the state of science:

The board of the American Board of Environmental Medicine wishes to point out that existing FCC guidelines for RF safety that have been used to justify installation of “smart meters” only look at thermal tissue damage and are obsolete, since many modern studies show metabolic and genomic damage from RF and ELF exposures below the level of intensity which heats tissues. The FCC guidelines are therefore inadequate for use in establishing public health standards. More modern literature shows medically and biologically significant effects of RF and ELF at lower energy densities. These effects accumulate over time, which is an important consideration given the chronic nature of exposure from “smart meters”. The current medical literature raises credible questions about genetic and cellular effects, hormonal effects, male fertility, blood/brain barrier damage and increased risk of certain types of cancers from RF or ELF levels similar to those emitted from “smart meters”. Children are placed at particular risk for altered brain development, and impaired learning and behavior. Further, EMF/RF adds synergistic effects to the damage observed from a range of toxic chemicals. Given the widespread, chronic, and essentially inescapable ELF/RF exposure of everyone living near a “smart meter”, the Board of the American Academy of Environmental Medicine finds it unacceptable from a public health standpoint to implement this technology until these serious medical concerns are resolved. We consider a moratorium on installation of wireless “smart meters” to be an issue of the highest importance. *Id.*